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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/516,760	12/03/2004	Thomas Rosch	ZAHFRI P692US	6731				
20210 DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301	7590 10/16/2007		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>VANAMAN, FRANK BENNETT</td></tr></table>		EXAMINER	VANAMAN, FRANK BENNETT		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/516,760

**Applicant(s)**

ROSCH, THOMAS

**Examiner**

Frank Vanaman

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) 22, 25, 27-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-21, 23, 24 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Status of Application**

1. Applicant's amendment, filed July 30, 2007, has been entered in the application. Claims 18-34 are pending, claims 1-17 and 35 have been canceled. Claims 22, 25 and 27-34 are withdrawn from consideration. An office action on claims 18-21, 23, 24 and 26 follows.

### **Claim Objections**

2. Claim 24 is objected to because of the following informalities: in claim 24, line 2, it appears that "connection" should be --connecting--. Appropriate correction is required.

### **Claim Rejections - 35 USC § 112**

3. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 21, line 4, "jointed rod" lacks a clear antecedent basis. From the context, it appears as though this is a reference to the --jointed shaft--.

### **Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 18 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Lutz (US 5,829,842, cited previously). Lutz teaches a drive wheel arrangement for an electrically driven multi-axle vehicle which includes an underbody (1, 41), each drive wheel unit including a single independently sprung (9) drive wheel (5), connected to a jointed shaft (19), having an end linkage (at 31) connected to the output of a drive train (15, 17), which is fixedly mounted (23, 27, 29) to the underbody, a single drive motor (13) connected to the drive train input (e.g., input of 15), fixedly mounted in the

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underbody (e.g., 21, 23, 27, 29), the motor mounted in a space radially offset from a wheel outer circumference (outwardly therefrom, see left wheel and motor set, figure 1; inwardly therefrom see right wheel and motor set, figure 1, also figure 2); the motor and wheel being sectionally co-planar (section taken in plane of figure 1 or perpendicular to the plane of figure 2); the motor and drive train being sprung masses, the wheel being an un-sprung mass, the drive wheel unit being located peripherally with respect to a central space (e.g., between 13, 13) in the underbody; the gear train having a housing portion (71, or 15b, 17b) which has a seal provided (left of bearing 69 or 69b) between the housing portion and associated end of the jointed shaft 19a, 31a and the underbody closing portion (23); the drive train being provided as a spur gear chain (see col. 8, lines 35-53).

### **Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutz (cited above). The reference to Lutz is discussed above and fails to explicitly teach that the motor is waterproof within the vehicle underbody. It is very well known in the electromechanical arts that proper operation of an electric motor requires that water and other debris be prevented from entering the functional portions of a motor. It is additionally very well known that it is necessary to prevent water from entering a motor in an electric vehicle. Additionally Lutz illustrates, but otherwise does not address, a further sealing element (see figures 1, 3, an element appearing to be a flexible sealing boot, e.g., proximate element 31). As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the motor accommodating

space in the vehicle of Lutz as expressly waterproof, so as to facilitate operation of the motor in damp or wet environments.

8. Claims 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutz in view of Brunner et al. (US 5,322,141). The reference to Lutz is discussed above and fails to teach a wheel-head transmission and an opening, in the area of the motor, which can be closed by a cover. Brunner et al. teach the provision of a motor (9) in a drive for a vehicle wheel which is provided with a wheel-head transmission (31) and, in an area of the motor, a cover (2) is provided to cover an opening. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an opening and cover in the area of the motor of the drive of Lutz, as taught by Brunner et al., for allowing access to the motor internal mechanism, and it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a wheel-head transmission as taught by Brunner, associated with the wheel of Lutz, for the purpose of further reducing the speed of the wheel drive, e.g., for use with higher speed motors.

#### **Response to Comments**

9. Applicant's comments, filed with the amendment, have been carefully considered. As regards the rejections under 35 USC §112, second paragraph, the examiner notes that the condition associated with claim 21, whilst having been explicitly pointed out by the examiner, and with a suggested change provided, has not been corrected.

Applicant asserts, in the remarks, that "[T]he entered claim amendments are directed solely at overcoming the raised indefiniteness rejection(s) and are not directed at distinguishing the present invention from the art of record in this case." Claim 18, however is now of notably different scope than previously presented:

at line 5, the claim now includes the limitation of a "single independently sprung drive wheel" which was not previously present in claim 18,

at lines 12-13, the claim now includes a recitation of the drive motor and drive train being spring masses, which was not previously present in claim 18,

at lines 13-14, the claim now includes a recitation of the wheel being an unsprung mass, which was not previously present in claim 18.

A review of the clarity-related rejections (i.e., those advanced under 35 USC §112, second paragraph) by the examiner in the previous office action (see paragraph 4 of the previous office action) does not reveal a perceived clarity issue with a lacking of a recitation of independently spring wheels, or the distinction between sprung and unsprung masses. Applicant is explicitly invited to point out which specifically advanced indefiniteness rejections are being overcome by this change in scope, and a fully responsive reply would be expected to include such a discussion.

Applicant has asserted that the combination of Oswald and Lutz be withdrawn in its application against the claims for numerous reasons set forth in the remarks. The examiner notes that whether these reasons are persuasive or not is moot, as applicant has amended the independent claim to be of substantially different scope, to the point that it is now anticipated by the reference to Lutz alone.

### Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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11. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

**F. VANAMAN**  
**Primary Examiner**  
**Art Unit 3618**

Handwritten signature of F. Vanaman, dated 11/5/07.